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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/462,765	06/02/00	GUTMAN R	440191/PALL

IM52/1030

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EXAMINER	
SAVAGE, M	
ART UNIT	**PAPER NUMBER**
1723	11

DATE MAILED: 10/30/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/462,765	Applicant(s) GUTMAN ET AL.	
	Examiner Matthew O Savage	Art Unit 1723	

-- Th MAILING DATE of this communication app ars on th cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 August 2001* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9,13-42,67 and 68* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9,13-42,67 and 68* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Concerning claim 6, it is unclear as to what composition the terms "FLUORODYNE" and "SUPOR" imply.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-9, and 13-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pall '483 in view Ohtani or Meyering et al.

With respect to claim 1, Pall '483 discloses a plastic housing 1,2 providing an inlet port 4 and an outlet port 6, the housing being capable of sterilization with steam (see lines 45-60 of col. 6) formed of a filter element 3 in the housing, the filter having a central passage, a first end cap attached to a first end of the filter medium to close the central passage, and a second end cap attached to a second end of the filter medium and providing a fluid connection between the passage and the outlet port. Pall '483 fails to specify the filter medium as being embedded in the end caps, the filter media being of water wettable material, and the first and second end caps as forming water wettable joints with the filter medium. Ohtani disclose a filter element including filter medium embedded in end caps (see lines 14-25 of col. 5) of a filter medium formed of water wettable material with first and second ends that form water wettable joints with the filter medium (see the abstract) and suggests that the joint between the filter medium are

leak free and can be integrity tested (see the examples in columns 6-8). It would have been obvious to have modified the filter of Pall so as to have included a filter element as suggested by Ohtani in order to provide a leak free joint between the filter medium that can be integrity tested. In addition Meyering disclose a filter element including filter medium embedded in end caps (see lines 10-3 5 of cot. 9) of a filter medium formed of water wettable material with first and second ends that form water wettable joints with the filter medium (see lines 36-38 of col.9) and suggests that the joint between the end caps and filter medium are leak free. It would have been obvious to have modified the filter of Pall so as to have included a filter element as suggested by Meyering et at in order to provide a leak free joint between the filter medium that can be integrity tested.

Concerning claim 2, Ohtani and Meyering disclose heating the end caps to soften the end caps and inserting each one of the first and second ends into the associated end cap while the associated end cap is softened (see lines 14-25 of col.5 of Ohtani, and lines 56-65 of col.8).

Regarding claim 3, Ohtani and Meyering discloses the first and second end cap plastic material being such that the characteristics of the filter medium adjacent the end cap are not altered by the embedding because Ohtani discloses the same combination of end cap material and filter medium as disclosed in the instant specification (e.g., polypropylene end cap and PVDF filter medium disclosed on line 49 of col. 3 and line 15 of col. 5 of Ohtani, and polyester or nylon end caps and a nylon filter medium disclosed on lines 24 and 26 of col.9 and lines 64-68 of col.9 of Meyering et al).

Concerning claim 4, Ohtani discloses a filter medium composed of PVDF and end caps formed of polypropylene.

Regarding claim 5, Ohtani discloses filter medium composed of polysulfone (see line 50 of col. 3) and end caps formed of polypropylene.

With respect to claim 6, Ohtani and Meyering disclose polypropylene end caps but fails to specify filter medium of FLUORODYNE or SUPOR, however, such membrane materials are well known in the art and would have been obviously selected to optimize the filter for a particular application.

Concerning claim 7, Meyering disclose filter medium of nylon and end caps of polyester or nylon polyester (see lines 24 and 26 of col.9 and lines 64-68 of col.9).

Concerning claim 8, Ohtani and Meyering disclose filters that are considered integrity testable.

Concerning claim 9, Ohtani and Meyering disclose plastic materials having the characteristics as recited in the instant claim because the references disclose the same combination of end cap materials and filter media materials as disclosed in the instant specification.

Regarding claim 13, Pall '483 discloses a housing capable of functioning as disclosed in the instant claim because the housing is formed of the same material as disclosed in the instant specification (see lines 45-60 of col.6).

Concerning claim 14, Pall '483 disclose the housing as being formed of polysulphone.

Regarding claim 15, Pall '483 discloses generally annular filter medium, a disk shaped end cap 9, and an annular end cap 10.

As to claim 16, Ohtani, Meyering, and Pall '688 disclosed pleated filter medium.

Regarding claim 17, Meyering et a] disclose a second end cap 34 having a projection 38 for reception in the associated port of housing.

Concerning claim 18, Pall '483 discloses a housing having first and second end walls (see FIG. 1), the port 2 being in fluid communication with the second end cap 10 in the second end wall, the filter element extending from the second end wall towards the first end wall.

As to claim 19, Pall '483 discloses the housing as having a side wall (see FIG. 1).

Regarding claim 20, Pall '482 discloses the housing as being formed by first and second housing parts 1,2 connected together.

As to claim 21, Pall '483 disclose the first housing part I as including the first end wall and the side wall and the second housing part 10 as including the second end wall.

Regarding claim 22, Pall '483 discloses the first housing part and the second housing part as cooperating to clam the filter element between the housing parts to hold the filter in the housing (e.g., part 16 of the filter being clamped between parts I and 2, see FIG. 3).

As to claim 23, Pall '483 discloses the filter element as including first and second oppositely facing clamping surfaces (e.g., defined by part 16), the first housing part I bearing against the first clamping surface and the second housing part 2 bearing against the second clamping surface (see FIG.3).

Regarding claim 24, Pall '483 discloses the first and second clamping surfaces as being formed on the second end cap 10 (see FIG. 3).

Concerning claim 25, Pall '483 discloses the first clamping surface as being formed on a flange 16 projecting from the second end cap.

Regarding claim 26, Pall '483 discloses the housing as being formed by first and second housing parts 1,2 connected together, the first and second housing parts coopering to clamp the filter element between the housing part to hold the filter element in the housing (see FIG.3), the filter element including first and second oppositely facing clamping surfaces (e.g., defined by part 16), the first housing part bearing against the first clamping surface and the second housing

part bearing against the second housing surface, the first and second clamping surfaces formed on the second end cap, the second clamping surface being formed on a portion of the second endcap extending around the projection in the case that the Meyering et al filter is employed.

Concerning claim 27, Pall '483 discloses the first housing part as having a peripheral edge 1b remote from the first end wall, the peripheral edge bearing against the flange 16 to force the second clamping surface against a portion of the second end wall of the housing around the port.

Regarding claim 28, Pall '483 discloses the filter medium 43 as being annular and having a curved exterior surface surrounded by a cage 30. In addition, Pall '688 discloses filter medium as being annular and having a curved exterior surface surrounded by a cage 15.

Concerning claim 29, Pall '688 discloses the cage as being formed of the same material as the end caps (see lines 1-6 of col.8).

Regarding claim 30, Pall '483 discloses the housing as including at least one valve (see lines 52-56 of col. 5).

With respect to claims 31-33, Pall '483 fails to specify the valve as being formed of a material that can be heat sterilized, however, such a modification would have been obvious in order to prevent contamination of the liquid being treated because the reference discloses that the filter housing that can be heat sterilized.

Concerning claim 34, Pall '483 fails to specify the valve as being formed from the recited materials, however, construction of valves from such material is well known in the art and would have been obvious in order to provide a valve that was cheap to fabricate and heat resistant to permit sterilization.

Regarding claims 66 and 67, Pall '483 discloses a housing capable of functioning as disclosed in the instant claim because the housing is formed of the same material as disclosed

in the instant specification (see lines 45-60 of col.6).

Claims 35-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pall '483 in view Ohtani or Meyering et al as applied to claim 30 above, and further in view of Wagner.

With respect to claim 35, Pall '483 fails to specify the recited details of the valve. Wagner discloses a valve including annular sleeve 17 surrounding a passage 10 generally circular in cross section as recited in the claim as suggests that such a valve is cheap to construct. It would have been obvious to have modified the combination suggested by Pall '483, Ohtani or Meyering et al so as to have include a valve as suggested by Wagner in order to provide a valve that was cheap to construct.

Concerning claims 36 and 37, Wagner discloses a valve member 12-15 capable of functioning as recited in the instant claim.

Regarding claim 38, Wagner discloses the sleeve 17 and valve member 12-15 as being connected together, the valve member extending into an end of the passage 10 and including a passage 15 capable of functioning as recited in the instant claim.

Concerning claim 39, Wagner discloses the valve as including a mechanism (e.g., sleeve 17 including the threads 19) capable of functioning as recited in the instant claim.

Regarding claim 40, Wagner discloses a mechanism capable of limiting axial movement of the valve (e.g., the valve member and stop 21).

Claims 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pall '483 in view Ohtani or Meyering et al in view of Wagner as applied to claim 39 above, and further in view of Schriner.

Concerning claims 41 and 42, Wagner fails to specify the recited pin and slot

arrangement, however, such arrangements are well known obvious equivalents in the valve art, as evidenced by Schriner, for increasing the extent of axial motion of a valve member per rotation of the valve member.

Applicant's arguments filed 8-22-01 have been fully considered but they are not persuasive.

With respect to the rejection of claim 6 under 35 U.S.C. 112, second paragraph, applicant argues that the compositions corresponding to the tradenames FLUORODYNE and SUPOR are definite since they correspond to materials available from Pall Corporation, however, the rejection is being maintained because the generic compositions corresponding to such tradenames not been recited in the instant claim. Applicant should note also that the compositions of tradenames are subject to change over time and therefore cannot be used to specify a particular composition in a claim.

With respect to the rejections under 35 U.S.C. 103 over Pall '483 in view of Ohtani or Meyering et al, applicants argue that the cited references fail to disclose materials that can be sterilized with steam under pressure, however, it is held that the materials disclosed by the references are capable of such a function because the references disclose the same materials as used in applicant's invention.

With respect to the rejections under 35 U.S.C. 103 in view of Wagner, it is argued that it is improper utilize the Wagner reference since Wagner fails to address the problems associated with steam sterilization, however, it is held that Wagner can be incorporated for reasons other than those concerning steam sterilization in order to form

a valid rejection under 35 U.S.C. 103. For example, to provide a reliable alternate valve structure that was economical to fabricate.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew O Savage whose telephone number is 703-308-3854. The examiner can normally be reached on Monday-Friday, 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda W. Walker can be reached on 703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3602 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

M. Savage

Matthew O Savage
Primary Examiner
Art Unit 1723

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October 26, 2001